DOCUMENT RESUME

ED 378 970 IR 055 335

AUTHOR Kiser, Joyce M.
TITLE Analysis of Interlibrary Loan Records from Demkee Medical Library Wooster Community Hospital, 1987-1992.
PUB DATE May 94
NOTE 58p.; Master's Research Paper, Kent State University.
PUB TYPE Dissertations/Theses - Masters Theses (042)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Community Health Services; *Cost Effectiveness; *Interlibrary Loans; *Library Acquisition; Library Collection Development; Library Cooperation; Library Networks; *Medical Libraries; Research Libraries; *Shared Library Resources; User Needs (Information); Use Studies
IDENTIFIERS *Professional Journals; *Wooster Community Hospital OH

ABSTRACT

As the price of scientific publications soars to Olympian heights, it becomes imperative to base selection decisions on reliable measures for potential use of the prospective titles. A systematic examination of interlibrary loan (ILL) requests should yield hard facts as to the nature of requests and areas of specialization most dependent upon resources outside the existing collection and should highlight subject areas in need of augmentation. The literature on similar use studies indicated that professional journals were the format of choice and that currency was of prime importance to the patrons of medical libraries. This study examined ILL requests from the staff of a small community hospital spanning five years. It was discovered that the in-house collection provided adequate coverage for day-to-day library use. The consortia operation provided the select materials needed for unique situations in a timely and efficient manner. No critical subject areas were exposed as inadequate nor were specific journals revealed to be logical candidates for acquisition. ILL remains the most satisfactory and cost effective method for meeting the information needs of patrons of a small hospital medical library. Data is presented in 12 tables and 4 appendices. (Contains 7 references.) (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

IR

ED 378 970

ANALYSIS OF INTERLIBRARY LOAN RECORDS FROM DEMKEE MEDICAL LIBRARY WOOSTER COMMUNITY HOSPITAL, 1987-1992

A Master's Research Paper submitted to the
Kent State University School of Library Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Joyce M. Kiser

May, 1994

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
R. DuMont

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR055835

ABSTRACT

As the price of scientific publications soars to Olympian heights, it becomes imperative to base selection decisions on reliable measures for potential use of the prospective titles. A systematic examination of interlibrary loan (ILL) requests should yield hard facts as to the nature of requests and areas of specialization most dependent upon resources outside the existing collection and highlight subject areas in need of augmentation. The literature on similar use studies indicated that professional journals were the format of choice and that currency was of prime importance to the patrons of medical libraries. This study examined ILL requests from the staff of a small community hospital spanning five years. It was discovered that the in-house collection provided adequate coverage for day-to-day library use. The consortia operation provided the select materials needed for unique situations in a timely and efficient manner. No critical subject areas were exposed as inadequate nor were specific journals revealed to be logical candidates for acquisition. ILL remains the most satisfactory and cost effective method for meeting the information needs of patrons of a small hospital medical library.

Master's Research Paper by

Joyce M. Kiser

B.A., University of Akron, 1988

M.A., Case Western Reserve University, 1990

M.L.S., Kent State University, 1994

Approved by

Adviser Lois Buttlar Date 5-10-94

To Dr. Lois Buttlar,
who fulfilled her role as
academic advisor with a spirit of
tolerance, patience, and a
sense of humor, and to
Elizabeth Martin, who has been
a trusted and true friend during
my sojourn in Wooster Community Hospital

TABLE OF CONTENTS

LIST OF TABLES iv

Chapter Page

I. INTRODUCTION 1

Rationale 1

Purpose 2

Background 2

Definition of Terms 3

II. REVIEW OF THE LITERATURE 5

III. METHODOLOGY 10

IV. ANALYSIS OF THE DATA 12

V. SUMMARY AND CONCLUSIONS 42

APPENDIXES

A. Memorandum of Understanding (Summa Hospitals) 44

B. Memorandum Regarding Library Service (Wooster Community Hospital) 46

C. Reference Request Form (Wooster Community Hospital) . 48

D. Interlibrary Loan Form 49

NOTES 50

BIBLIOGRAPHY 51

LIST OF TABLES

Table		Page
1.	Usage Analysis of All Titles Sought Through Interlibrary Loan	14
2.	Record of the Journal Titles Requested Five or More Times	29
3.	Frequencies of Journal Requests	29
4.	Frequencies of Requests by Format	30
5.	Subject Areas of Materials Sought (When Known)	30
6.	Analysis of Subject Requests	38
7.	Frequency of Subject Requests	39
8.	Currency of Information Sought	39
9.	Number of Pages in Items Sought	39
10.	Location of Materials Borrowed	40
11.	Breakdown of Requests by Year	40
12.	Groups Most Frequently Utilizing ILL Services	41

CHAPTER I

INTRODUCTION

Rationale

The doctors' library in Wooster Community Hospital, dubbed the Demkee Medical Library, has recently been relocated to the first floor. Enthusiasm for the attractive new facility has been tempered with regret, since budgetary constraints compelled the administration to release a trusted and highly regarded librarian of thirteen years. To compensate for the loss of the librarian's services, Wooster Community Hospital entered into an agreement with Akron City Hospital that makes provisions for reference services, Interlibrary Loan (ILL), and consulting services. (See Appendices A, B, and C.)

The collection of Demkee Medical Library is comprised of 228 texts and 22 medical journals. Traditionally $1,000 has been set aside annually for acquisitions. As the price of scientific publications soars to Olympian heights, it becomes imperative to base selection decisions on reliable measures of the prospective titles' potential for use.

Purpose of the Study

This project should highlight subject areas in need of augmentation and produce a list of specific journal titles for consideration, should funding be secured to update the collection.

By becoming aware of the areas of patient care where timely information is essential and identifying the areas of medicine where physicians are most involved in gathering new data, the proposed investigation should ultimately lead to a more effective and efficient use of resources available to Wooster Community Hospital.

Background

The edifice that has served as home to Wooster Community Hospital since the 1940s was born of an amiable interface between tax funds and private donations. The pleasant atmosphere created by the successful marriage between public and private sectors has enabled the hospital to proceed gracefully through periods of continued growth. While functioning as the heart of Wooster's body of health care, Wooster Community Hospital also occupies a unique position in the state of Ohio as the last remaining community hospital. The degree to which the hospital is held with pride and affection in the minds of Wooster's citizens is evidenced by an impressive volunteer force of more than six hundred.

The hospital staff, endeavoring to be sensitive to the changing needs of the population, provides wellness information, rehabilitation, and a variety of testing programs to local business and industry. The recent provision of new critical care facilities, oncology center, breast imaging center, audiology department, cardiac rehabilitation program, and an expanded obstetrics department attests to the administration's desire to make current innovations available.

A medical staff of seventy-seven physicians, an unusually large proportion of whom are board certified, provides services in critical care, intravenous therapy, and areas of medical-surgical, pediatrics, obstetrics-nursing, surgery-recovery room, emergency department, diabetic clinic, endoscopy and enterostomal therapy.

The library facility and its reference services are extended to the hospital administration and nursing staff as well as to the physicians.

Definition of Terms

Evaluation research: The application of the scientific method to determine how well a program is performing.[1]

In-house use: Any request for a photocopied article that can be filled from the extant collection.

Interlibrary loan use: Requests borrowed from outside sources indicates areas in which the present in-house journal

collection is insufficient and may be used to generate a list of periodical titles for selection consideration.

Users: The administrators, physicians, and nurses who have access to the library and its services.

CHAPTER II

A REVIEW OF THE LITERATURE

William H. Kurth conducted a consequential analysis of ILL requests for serials filled by the National Library of Medicine over the course of the year 1959. His findings are historically significant in documenting the conditions of the ILL system prior to the creation and installation of online searching techniques, MEDLARS, the Regional Medical Library (RML) Network, and union listing for serials. Kurth's survey, which focused on a detailed examination of nearly 78,000 requests for serials, indicated that in 93% of the occasions when ILL services were utilized, periodical articles were the form of information sought. He identified the serial titles most frequently requested, summarized the characteristics of the requesting libraries, and explained the web of logical connections between the two.[2]

A later examination by Lacroix of 142,464 ILL requests filled by the National Library of Medicine from October 1, 1983 to September 30, 1984 revealed that in 94% of the cases, periodical articles were sought. In late 1984, the National Library of Medicine reviewed ILL requests by analyzing the

portion of the 142,464 requests that had been encoded in machine-readable form. They reported that of that total, 86,803 requests had been filled for libraries and that 4,663 had been filled for the World Health Organization (WHO). The requesting libraries were characterized by their individual attributes in regard to frequency of exercising the ILL option and by their geographic distribution. The list of serial titles from which articles were photocopied by the National Library of Medicine was divided according to frequency of use, the time period of publication of the serials requested, by language, and country of origin. A list of the most frequently sought titles was also drawn up. It was determined that during 1959 and 1984, only a tiny percentage of the overall serial holding was utilized to provide ILL services.[3] Says Lacroix:

> It is not surprising to find that the highest use (95%) of the serials collection is for articles published since 1950. The nature of medical research and clinical practice dictates that the most current information be used. Except in rare cases, the older material is used for historical research or background information.[4]

Bleeker, who examined 60,779 external ILL requests for copies of articles from the Erasmus University Medical Library in 1988, reported that 50% of requests were for data published over the most recent two-year period and that 90% of the requests could be filled from a twenty-year run of serials.[5]

Four thousand one hundred fifty-seven internally generated requests for periodicals not belonging to the collection were analyzed in 1989 to glean information as to which titles were most frequently sought and thus logical candidates to consider for acquisition. The titles were grouped by areas of medical specialization.[6]

While gathering evidence to aid in making a choice of Medline's CD-Rom products, Bernal conducted an analysis of ILL records at the James A. Haley Veterans Hospital. The study indicated that the number of requests for resources outside the existing collection was reduced if the list of citations given to the patron indicated whether or not the journal was owned by the hospital library. In many cases, the information seeker opted to choose articles from the readily available titles.[7]

In a discussion of approaches for collecting ILL data for the Illinois Statewide Interlibrary Loan System, Dalrymple suggested the following items for consideration:

-- Who is being served (i.e. data on user characteristics)

-- Quality of the initial request (e.g. completeness)

-- Mode of communication of request (e.g. mail, OCLC)

-- Requests sent for known items (e.g. author/title)

-- Known items requests received and known items sent

-- Requests sent for subject information

-- Subject requests received and subject items sent

-- Fill rate for both known items requests and for subject requests

-- Promptness of response (e.g. document delivery)

-- Destination of the request sent and source of the material/information

-- Type of material (e.g. book, video)

-- Bought or borrowed (i.e. photocopy or actual item sent)

-- Subject area of requests and/or items received

-- Risk factor of the transaction (i.e. rare or fragile items subject to damage or loss)

-- Direct cost of the transaction

-- Labor cost of the transaction.[8]

While not all items proposed would be of equal importance to every library, the list provides a foundation from which to begin organizing ILL data.

Shelley collected and analyzed in-house as well as ILL journal use statistics in the Northside Medical Center Library of the Western Reserve Care System of Youngstown, Ohio. She found ILL an expensive, time-consuming inconvenience for physicians who tend to need information immediately. She determined that if an article were borrowed less than three times from a particular journal, it was cost effective to utilize the ILL system, but if an article were requested more

than five times, the journal should be considered for purchase.[9]

To review, in the past ILL records have been considered valuable sources of information to be tapped to gain insight into establishing a quality journal collection and intelligent use of the ILL option. The careful consideration of the existing ILL records for Demkee Medical Library should help guide administrators as they contemplate selection choices for the next fiscal year.

CHAPTER III

METHODOLOGY

Individual ILL requests from Demkee Medical Library were systematically examined. Requests were chosen at random for the following periods: one month of 1988, three months of 1989, six months of 1990; the entire years of 1991 and 1992 were analyzed. (See Appendix D.)

A list was compiled of the professional journal titles, texts and videos sought during the time periods under scrutiny and an indication made as to the number of times each title was sought. A table was devised to illustrate the journals most heavily drawn from.

When possible, the topical subject of the materials gathered was examined to identify areas not adequately covered by the in-house collection of journals and texts belonging to Demkee Medical Library.

Tables were constructed to indicate the format of items sought, the frequency of ILL usage by department of the library's patrons, the currency of materials sought, number of pages sought, and effectiveness of the consortium's ability to fill the ILL requests.

As this study involved only patterns of external journal usage, no hard facts were gathered as to how frequently the in-house collection was utilized.

It may also have been desirable, if it were possible, to learn from library users how frequently the information gathered affected the method of treatment employed.

CHAPTER IV

ANALYSIS OF THE RECORDS

When viewing the statistics of ILL activity for Demkee Medical Library it is not remarkable to detect a decline in patron requests. The one month chosen at random from 1988 indicated that forty-seven periodical articles were requested. That number represents more than half the total sought for a three-month period in 1989 (ninety-seven requests). The tally for six months in 1990 was only 163.

Undoubtedly, the decreasing occurrence of library related activity reflects the adjustment made in the librarian's schedule reducing the number of days he spent in Wooster Community Hospital from three days per week to one.

Despite this complication, 251 ILL requests were made in 1991. The former librarian was able to provide effective service to his patrons because he brought his own computer to the hospital and used his personal Grateful Med CD Roms. His patrons were often able to leave the library with a list of citations in hand and also gained the advantage of being able to view the computer screen and to adjust their search terminology according to its apparent effectiveness.

The availability of the librarian for an entire day increased the likelihood that the searcher could participate in an adequate reference interview rather than being left to fill out a written and often too general reference request.

When the decision was made in 1992 to let the librarian go, it was in favor of acquiring the most cost effective services provided by Summa Health Care System. (See Table 11.)

A dramatic drop in ILL requests, only seventy-two for a twelve-month period, gives evidence of the period of upheaval between the cessation of one method of service and the installation of another.

An analysis of the data reveals that of the 630 titles sought during the period being studied, 98% were requested fewer than five times. Monographs and videos were borrowed on one occasion only. (See Tables 1 and 3.)

The most requested journal, Endocrinology and Metabolism Clinics of North America, was sought nine times. Nursing Journal was sought on eight occasions, and The American Journal of Cardiology was sought seven times. (See Table 2.)

Professional journals were the format of choice, representing 98% of all ILL requests; monographs or pages photocopied from monographs were sought in 4% of the cases, and requests for videos represented 1% of the total. (See Table 4.)

Sixty-nine percent of the 208 subject areas indicated was pursued fewer than five times. (See Tables 5 and 6.) Cancer and related topics received the highest number of requests, recording forty-four occurrences. Marfan's Syndrome and steroid use were each sought thirteen times. The prevention of teen pregnancy was explored eleven times, and the subjects of diabetes and migraine headache were each sought eight times. The subject of AIDS was sought on six occasions. (See Table 7.)

In 70% of the cases, the data being sought was less than two years old (See Table 8) and was, in 53% of the cases, from one to three pages in length. (See Table 9.)

The IMPINO consortium of medical libraries was an adequate information source successfully filling 96% of all ILL requests. (See Table 10.)

Physicians were the largest group to utilize ILL services, representing 50% of the library's patrons. Fourteen percent of that total was surgeons, 12% was internal medicine specialists, and 9% was family practice physicians.

Thirty-seven percent of the library's patrons were nurses. Of that total, oncology nurses represented 14% and surgery nurses 7%. The nursing administration represented the third highest user group, utilizing services 6% of the time. (See Table 12.)

TABLE 1

USAGE ANALYSIS OF ALL TITLES SOUGHT
THROUGH INTERLIBRARY LOAN

Titles	Frequency
Journal Titles	
AAOHR Journal	1
ACTA Chirurgica Scandinavica	1
ACTA Dermatologica	2
ACTA Oncologica	1
ACTA Orthopaedia Scandanivica	1
ACTA Pathologica Et Microbiologica Scandinavica	1
Addictive Behavior	1
Advances In Clinical Chemistry	1
Advances In Internal Medicine	2
Advances In Neurology	2
AIDS Care	4
Alaska Medicine	1
Alcoholism	2
American Family Physician	2
American Heart Journal	1
American Industrial Hygiene Association Journal	2
American Journal of the Disabled Child	2
American Journal of Cardiology	7
American Journal of Cardiovascular Pathology	1

Titles	Frequency
American Journal of Clinical Pathology	2
American Journal of Community Psychology	1
American Journal of Diseases in Childhood	3
American Journal of Epidemiology	1
American Journal of Gastroenterology	2
American Journal of Hematology	1
American Journal of Human Genetics	1
American Journal of Industrial Medicine	3
American Journal of Medical Sciences	2
American Journal of Medicine	1
American Journal of Nursing	5
American Journal of Obstetrics and Gynecology	2
American Journal of Ophthalmology	1
American Journal of Perinatoloty	3
American Journal of Preventative Medicine	1
American Journal of Psychiatry	1
American Journal of Psychotherapy	1
American Journal of Respiratory Cell and Molecular Biology	2
American Journal of Roentgenology	3
American Journal of Sports Medicine	1
American Journal of Surgery	2
Anesthesia and Analgesia	1
Annals of Emergency Medicine	2
Annals of Internal Medicine	3
Annals of Neurology	1
Annals of Ophthalmology	1
Annals of Surgery	2

Titles	Frequency
AORN Journal	1
Applied Neurophysiology	1
Archives of Dermatology	5
Archives of Environmental Health	2
Archives of Diseases in Childhood	4
Archives of General Psychiatry	1
Archives of Internal Medicine	1
Archives Of Neurology	1
Archives Of Ophthalmology	2
Archives of Otolaryngology-Head and Neck Surgery	2
Archives of Pathology and Laboratory Medicine	3
Archives of Physican Medicine and Rehabilitation	3
Arctic Medical Research	1
Arizona Medicine	1
Arthritis and Rheumatism	3
Australian Family Physician	2
Australian and New Zealand Journal of Medicine	3
Behavioral and Social Sciences Librarian	2
Biological Sciences Curriculum Study Journal	3
Biochemical Pharmacology	3
Birth	6
British Dental Journal	1
British Heart Journal	3
British Journal of Cancer	1
British Journal of Clinical Practice	1

Titles	Frequency
British Journal of Hospital Medicine	1
British Journal of Medical Education	1
British Journal of Medical Science	1
British Journal of Obstetrics and Gynecology	7
British Journal of Ophthalmology	1
British Journal of Psychiatry	1
British Journal of Rheumatology	1
British Journal of Surgery	1
British Medical Journal	3
Bulletin of the Medical Library Association	1
Bulletin of the Menninger Clinic	1
Bulletin of the New York Academy of Medicine	1
Caduceus	1
Canadian Journal of Ophthalmology	3
Canadian Journal of Psychiatry	2
Canadian Medical Association Journal	5
Cancer	1
Cancer Nursing	1
Cardiovascular Clinics	2
Cephalalgia	1
Chest	1
Children Today	1
CIBA Symposia	1
Circulation	3
Cleveland Clinic Quarterly	2
Clinical Pediatrics	1
Clinical Gerontologist	1

Titles	Frequency
Clinical Neurosurgery	3
Clinical Nursing Research	1
Clinical Pediatrics	1
Clinical Pharmacology and Therapeutics	2
Clinical Pharmacy	3
Clinical Toxicology	1
Connecticut Medical Journal	2
Critical Care Medicine	1
Critical Care Nursing	2
Culture, Medicine, Psychology	1
Current Opinion in Radiology	1
Current Studies in Hematology and Blood Transfusion	2
Death Studies	6
Dental Abstracts	1
Dental Management	1
DePaul Law Journal	6
Dermatologic Clinics	1
Diabetes	3
Disease-A-Month	4
D.O.	1
Drug Intelligence and Clinical Pharmacy	2
Drugs Review	1
Economic Botany	1
Emergency Medical Clinics of North America	2
Emergency Medical Service	2
Emergency Medicine	2
Endocrinology and Metabolism Clinics of North America	9

Titles	Frequency
European Heart Journal	1
European Journal of Obstetrics, Gynecology and Biology	2
Family Community Health	2
Family Planning Perspectives	1
FASEB Journal	1
Fertility And Sterility	1
Fijdschr Diergeneeskd	3
Gastrointestinal Endoscopy	1
General Hospital Psychiatry	3
Geriatric Nurse	4
Gerontologist	1
Group Practice	2
Gynecologic Oncology	1
Hawaiian Medical Journal	2
Headache	1
Health	2
Health Care Management Forum	1
Health Care Management Review	3
Health Care Planning and Marketing	1
Health Care Strategy Management	1
Health Care Women's International	1
Health Education	1
Health Education Quarterly	2
Health Programs	2
Health Systems Review	1
Health PAC Bulletin	1
Heart Lung	2

Titles	Frequency
Hematology Oncology Clinics of North America	5
Home Health Nurse	4
Hospital Administration Current	2
Hospital and Community Psychiatry	2
Hospital Management Review	2
Hospital Pharmacy	1
Human Biology	1
Human Nutrition Applied Nutrition	2
Hygiene	1
Image Journal of Nursing Schools	2
Indian Journal of Ophthalmology	1
Indian Pediatrics	2
Indiana Medicine	1
Infection	1
Infection Control and Hospital Epidemiology	2
Injury	1
Inquiry	2
International Journal of Health Services	1
International Journal of Nursing Studies	2
International Journal of Ophthalmology Clinics	1
International Journal of Psychosomatics	1
International Journal of Radiation Oncology, Biology, Physics	3
Investigative New Drugs	1
Investigative Ophthalmology and Visual Science	4
JBJS	1
Johns Hopkins Medical Journal	2

Titles	Frequency
JOJN Nursing: Journal of Obstetric, Gynecologic and Neonatal Nursing	1
Journal of Adolescent Health	1
Journal of Advanced Nursing	2
Journal of the Alaska Medical Society	1
Journal of Ambulatory Management	1
Journal of the American College of Cardiology	2
Journal of the American Geriatric Society	2
Journal of the American Medical Association	2
Journal of the American Osteopathic Association	2
Journal of the American Podiatric Medical Association	2
Journal of the American Veterinary Medical Association	1
Journal of Antimicrobial Chemotherapy	2
Journal of the Arkansas Medical Society	1
Journal of the Association of Pediatric Oncology Nurses	1
Journal of Behavioral Theraphy and Experimental Psychiatry	1
Journal of Behavioral Medicine	1
Journal of Bone and Joint Surgery, American Volume	2
Journal of Chemotherapy	1
Journal of Christian Nursing	1
Journal of Clinical Endocrinology and Metabolism	2
Journal of Clinical Gastroenterology	2
Journal of Clinical Hospital Pharmacy	1
Journal of Clinical Psychiatry	1

Titles	Frequency
Journal of Clinical Psychology	1
Journal of Community Health	2
Journal of Ethnobiology	1
Journal of Family Practice	1
Journal of Florida Medical Association	2
Journal of Foot Surgery	2
Journal of Gerontological Nursing	1
Journal of Gerontology	2
Journal of Hand Surgery	1
Journal of Health Politics, Policy and Law	1
Journal of History of Medicine and Applied Sciences	1
Journal of Home Health Care Products	1
Journal of Homosexuality	1
Journal of Hospital Pharmacy	4
Journal of Infectious Dermatology	2
Journal of Infectious Diseases	2
Journal of Medical Education	1
Journal of Medical Ethics	1
Journal of Medical System	1
Journal of Mississippi State Medical Association	1
Journal of Nervous and Mental Disease	2
Journal of Neurotransmission	1
Journal of Neuroscience Nursing	2
Journal of Neurology	1
Journal of Neurological Sciences	1
Journal of Nurse Midwifery	2
Journal of Nursing Administration	1

Titles	Frequency
Journal of Nursing Medicine	1
Journal of Nursing Quality Assurance	3
Journal of Oral and Maxillofacial Surgery	2
Journal of Pain and Symptom Management	1
Journal of Pediatric Health Care	1
Journal of Pediatric Review	2
Journal of the Royal College of General Practitioners	2
Journal of the Royal College of Physicians, London	1
Journal of the Royal Society of Medicine	2
Journal of Reproductive Medicine	2
Journal of School Health	1
Journal of Sex and Marital Therapy	3
Journal of Toxicology. Clinical Toxicology	1
Journal of Urology	1
Kansas Nurse	1
Laboratory Medicine	2
Lancet	1
MMWR	3
Mayo Clinic Proceedings	6
MCN The American Journal of Maternal Child Nursing	3
Maryland Medical Journal	2
Medical Care	3
Medical Clinics of North America	1
Medical Economics	2
Medical Journal of Australia	4
Medical Law	3
Medicine and Science in Sports and Exercise	1

Titles	Frequency
Metropolitan Life Insurance Company Statistical Bulletin	1
Michigan Medicine	2
Milbank Memorial Fund Quarterly	1
Military Medicine	2
Missouri State Medical Journal	1
Nature	1
Neurologic Clinics	2
Neurology	1
Neurotoxicology	2
Neurosurgery	2
New Directions in Mental Health	2
New England Journal of Medicine	5
New Scientist	2
North Carolina Medical Journal	2
Nurse Education Today	2
Nurse Practitioner	1
Nursing (Oxford)	1
Nursing Administration Quarterly	3
Nursing Clinics of North America	2
Nursing Economics	1
Nursing Homes	1
Nursing Management	2
Nursing Mirror	4
Nursing Outlook	2
Nursing Research	2
Nursing Times	8
Obstetrics and Gynecology	5

Titles	Frequency
Obstetrics and Gynecological Survey	1
Occupational Health Nurse	1
Oncology	2
Ophthalmology Review	2
Ophthalmology Surgery	1
Ophthalmologica	2
Oral Surgery, Oral Medicine, Oral Pathology	1
Otolaryngologic Clinics of North America	2
Otolaryngology-Head and Neck Surgery	1
Pain	1
Pediatric Annual	1
Pediatric Clinics of North America	2
Pediatric Nursing	2
Pediatric Review	2
Pediatrics	6
Physical Therapy (Stuttgart)	1
Primary Health Care in South Africa	1
Profiles in Health Care	2
Profiles in Hospital Marketing	5
Psychiatric Quarterly	1
Psychosocial Rehabilitation Journal	4
Psychosomatics	1
Public Opinion Quarterly	1
Postgrad Medical Journal	1
Radiology	2
Reference Quarterly	1
Registered Nurse	1
Review of Infectious Disease	1

Titles	Frequency
Sarcoidosis	1
Scandanavian Journal of Urology and Nephrology	1
Seminars in Respiratory Medicine	1
Seminars in Ultrasound	2
Sexually Transmitted Diseases	1
Social Work Health Care	1
Social Science Medicine	2
Southern Medical Journal	1
Stroke	2
Suicide and Life Threatening Behavior	1
Surgical Ophthalmology	1
Texas State Journal of Medicine	1
Topics in Hospital Pharmacy Management	1
Transactions-Studies of the College of Physicians, Philadelphia	1
Urology	2
VA Medicine	2
West Virginia Medical Association Journal	1
Western Journal of Medicine	2
Monograph Titles	
Advances with Exposure, Health and Environmental Effects, Studies of PCBs	1
American Health in the Balance, Choice or Chance?	1
Animals, Aging, the Aged	1
Atlas of Head and Neck Surgery	1
Boundaries	1
Comprehensive Pediatric Nursing	1
Controversies in Orthopaedic Surgery	1

Titles	Frequency
Coordination of Service, Hospital to Home	1
Genes	1
Going High: The Story of Man and Altitude	1
Health of Nations	1
Information Brokers	1
Manual of Quality Assurance for Nurses	1
Market Driven Strategies in Health Care	1
Measuring Health	1
Mutual Help Groups	1
Nutrition, Weight Control, and Exercise	1
Pet-Oriented Child Psychotherapy	1
Pets and Human Development	1
Public Health and Preventative Medicine	1
Report of the Commission of the Inquiry Into Human Fertilization, Embryology	1
Textbook of Critical Care	1
Well-Managed Community Health	1
Video Titles	
Clinical Analysis of Ethical Dilemmas	1
Dr. I Want . . .	1
Extraordinary Life Support and the Right to Die	1
Total	630

TABLE 2

RECORD OF THE JOURNAL TITLES REQUESTED
FIVE OR MORE TIMES

Journal Titles		Times Used
1.	Endocrinology and Metabolism Clinics of North America	9
2.	Nursing Times	8
3.	American Journal of Cardiology	7
4.	Death Studies	6
5.	DePaul Law Journal	6
6.	Mayo Clinic Proceedings	6
7.	Pediatrics	6
8.	Archives of Dermatology	5
9.	Birth	5
10.	Canadian Medical Journal	5
11.	New England Journal of Medicine	5
12.	Obstetrics and Gynecology	5
13.	Profiles in Hospital Marketing	5

TABLE 3

FREQUENCIES OF JOURNAL REQUESTS

Journal titles requested five or more times	98%
Journal titles requested fewer than five times	2%

TABLE 4

FREQUENCIES OF REQUESTS BY FORMAT

Format	Percentage
Videos	1%
Monographs	4%
Professional Journals	95%

TABLE 5

SUBJECT AREAS OF MATERIALS SOUGHT (WHEN KNOWN)

Subject Area	Frequency
Abnormalities on CT of children: clinical correction	1
Adolescent pregnancy, prevention	1
Adolescent smoking	2
Agent Orange	1
AIDS	6
AIDS, loved ones with	2
AIDS, death of lover	1
Alcoholics, activity and lives of	1
Alfentanil, Fentanyl, Sufentanil, criteria for use	1
Alzheimers disease	1
Amish, the effects of religious beliefs on health care	1
Analysis of exercise	1
Animal companionship	1
Ankle arthrodesis	1

Apocrine mammary cancer	1
Applying assessment techniques	1
Artery disease	1
Artificial insemination by donor	1
Arrythmic death	1
Asbestos exposure	1
Atrial fibrilation	1
Autism	1
Automated hematology cell counters, spurious results	1
BCG vaccines, role of	1
Beethoven, deafness	1
Biochemical consequences of sport shoe design	1
Bone marrow transplant	1
Bromocriptine, injectable dose, comparison of	1
Cancer	28
Cancer, chronic pain	8
Cancer, chronic insomnia	1
Cancer Family Syndrome	1
Cardiac rehabilitation	1
Cardiotoxicity during chemotherapy	1
Chemotherapy, head and neck, current procedures	1
Chilatron therapy	1
Child abuse -- neglect, policy decisions	2
Children and pets	1
Choosing a computer	1
Clinical studies of repro toxicology	1
C-section, more than one previous	1
Clinical value of foredon	1

Corneal erosion, reoccurrance	1
Coronary disease, Eskimos	1
Conflicts in practice	1
Congenital posterior dislocation, head of radius	1
Construct validity and air components, survey measures	1
Coping with domestic violence	1
Core lists, small psychology libraries	1
Cost and quality, balancing issues through management	1
Community health care centers	1
Developing professional appraisal systems	1
Diabetes	8
Dietary fiber	1
Distressed high utilizers of medical care	1
Dog bite wounds	1
Downs Syndrome, screening	3
E.R.P., risk factor of	1
Early childhood, night waking and temperament	1
Effective credentialing	1
Evaluating personnel	1
Exercise	4
Exercise, following coronary	1
Expanded roles for hospital libraries	1
Familial benign hypercalcemia	1
Farm accidents, children	2
Fluorinated pyramidines, clinical trials	1
Fragmented coronid process	1
Fresh frozen plasma	1
Future of nurse care delivery	1

Gerontological nursing, development of standards	1
Gestational age, glygene control	1
Glaucoma	4
Grant development process	1
Granulomatous gastritis, isolated	2
Haitian women, beliefs	1
Hallux regidue	1
Health care in South Africa	1
Health hazard appraisal	1
Health safety hazards	1
Heart failure, symptoms	1
Hepatobilliary imaging	1
Hip replacement	1
Highway hospice	1
Hodkins Disease in the elderly	1
House bill 2531	1
Housekeeping in hospitals, effective policies	1
Hospital decisionmaking	1
Hospital libraries, expanded roles	1
Human papillomavirus infection	1
Human papillomavirus infection, current concepts	1
Hydrogen sulfide	1
Hydroprene, influence on German cockroach	1
Hyperthyroidism	1
IDDM pregnancy	1
Identifying patients at risk	1
Incidental paranasal sinus	1
Information age/physician liability	1

Integrating value into job descriptions	1
International Congress on Twin Studies	1
Japanese health care	1
Jaundice, in healthy newborns	1
Job descriptions	1
Laparoscopic cholangiography	1
Larynx	1
Laxative abuse	1
Letters of Freud, ten unpublished	1
Library service, is it essential?	1
Lifestyle assessment, homosexuals	1
Lipid metabolism	1
Love potions, Andros Islands	3
Managing the one-person library	1
Marfan's Syndrome	13
Mast cell, role of	1
Mastectomy	4
Maternity, early discharge	1
Maternity, surgery unit	1
Medical advances after great war	1
Medical care	2
Medical intelligence	1
Methylene oxide	1
Microcomputer in hospital pharmacy	1
Migraine headache	8
Mislabeling sexual impulsivity	1
Mozart, medical history and death	1
Muscle contraction headache	1
Myasthenia Gravis, unilateral ocular	2

Mycobacteria, response to U.V. radiation	1
Neck flexion	1
Neurosurgery techniques	1
Nicotine replacement therapy	1
Night duty nurse	1
Nurse executive, year of	1
Nursing, setting up support groups	1
Nursing jobs, satisfaction	1
Nursing productivity	2
OB, marketing of	1
OB design	1
Obese children	1
Obsessive/compulsive disorder	1
Oncology nursing	6
One-day maternity care	1
Opiate reception, migraine	1
Osteochondritis dissecans of capitellum	1
Osteochondritis dissecans of medial humeral condyle	1
Out-of-hospital cardiac arrest	1
Participatory management	1
Passive smoke	1
Paternal contributions to birth defects	1
Patient oriented drug data sheets	1
People and pets	1
People, types and productivity	1
Pesticide illness	1
Pet therapy	1
Physician surplus	1
Physiological effects of petting an animal	1

Pharmacological management of migraine	1
Pineal tumors	1
Postartum care	1
Prenatal decrease in insulin	1
Preventing nurse burnout	1
Primary carcinoma of urinary bladder diverticula	1
Primary hyperthroidism, lab diagnosis	1
Primary hyperthyroidism, management	1
Primary hyperthyroidism, bone disease	1
Prisoners, handling of	1
Psychocardiology	1
Psychological component of infertility	1
Publishing opportunities for nurses	1
Quality of life	4
Rape victim treatment	1
Reconstructive maxilla	1
Recurrent teen pregnancy	11
Referral systems	1
Restless leg syndrome	1
Rett Syndrome	1
SSM Network	1
School based HIV prevention	1
Selecting a journal	1
Shared governance	1
Sinus	1
Stingray venom wound necrosis	3
Sleep center/sleep disorder laboratory	1
South Africa	2
Steroids	13

Strength training	1
Stresses in coping, ICU nursing	1
Stroke	2
Sudden Infant Death Syndrome	1
Suicide, Kentucky farmers	1
Surgical dressing	1
Surgery fees and income	1
TB, skin tests	1
TME, primary hyperhidrosis	1
Telephone triage	1
Terminally ill family	1
Thoroscopic vagotomy	1
Transcultural sexology	1
Transfusion	1
Trial labor	1
Truncus atriosis	1
Urologists, too many?	1
Use of auto external defiles	1
Vaginal delivery after C-section	4
What's your LQ?	1
Winning at the stock market	1
	329

TABLE 6

ANALYSIS OF SUBJECT REQUESTS

Subject	Frequency
Cancer and related topics	44
Marfan's Syndrome	13
Steroid use	13
Teen pregnancy	11
Diabetes	8
Subject	Frequency
Migraine Headache	8
AIDS	6

TABLE 7

FREQUENCY OF SUBJECT REQUESTS

Subjects requested less than five times	69%
Subjects requested more than five times	31%

TABLE 8

CURRENCY OF INFORMATION SOUGHT

Age of Publication	Percentage
1 to 2 years old	70%
3 to 4 years old	17%
5 to 7 years old	12%
8 to 12 years old	1%

TABLE 9

NUMBER OF PAGES IN ITEMS SOUGHT

Number of Pages	Percentage
1 to 3 pages	53%
5 pages	35%
6 to 10 pages	8%
Over 10 pages	3%

TABLE 10

LOCATION OF MATERIALS BORROWED

Location	Percentage
Within consortium facilities	96%
Libraries beyond consortium	4%

TABLE 11

BREAKDOWN OF REQUESTS BY YEAR

Time Period Studied	Number of Requests
One month of 1988	47
Three months of 1989	97
Six months of 1990	163
Twelve months of 1991	251
Twelve months of 1992	72
Total	630

TABLE 12

GROUPS MOST FREQUENTLY UTILIZING ILL SERVICES

Physician Group: 50%	
Subgroup:	Percentage
Surgery	14%
Internal Medicine	12%
Family Practice	9%
Emergency Medicine	7%
Obstetrics/Gynecology	3%
Dental Clinic	2%
All other specialties	3%

Nursing Group: 37%	
Subgroup:	Percentage
Oncology	14%
Surgery	7%
Administration	6%
Dietary	4%
Obstetrics/Gynecology	3%
All other specialties	3%

Other Hospital Employees: 13%	
Subgroup:	Percentage
Hospital Education	8%
Hospital Administration	2%
Housekeeping	1%
Omen Committee	1%
Medical Records	1%
Grand Total	100%

CHAPTER V

SUMMARY AND CONCLUSIONS

Useful inferences may be drawn from the results of the study.

The fact that 96% of the items sought were borrowed from the Medical Periodicals in Northeastern Ohio (MPINO) is an indication of the effectiveness of the consortium of libraries that have succeeded in pooling their resources to create an information source that no individual institution could maintain.

One may also assume that the in-house collection of texts and professional journals in Demkee Medical Library adequately covers the routine circumstances of daily operation, since 87% of the journal titles requested through ILL were sought fewer than five times and the most requested journal title, Endocrinology and Metabolism Clinics of North America, was cited only nine times.

The subject range of the in-house collection must also be adequate since of the 206 subjects identified on ILL citations, 92% were requested only once. The most investigated subject, cancer and its treatment, reflects the

identity of the most frequent ILL patrons, the surgeons and internal medicine specialists and surgery and oncology nurses.

It seems clearly evident that ILL remains the most desirable way to meet the information needs of the patrons of Demkee Medical Library since 96% of the items sought were reprints from professional journals rather than texts, 70% of the items were current--from one to two years old--and in 53% of the cases the number of pages photocopied were three or less per article. Therefore it is far more cost effective to access the journals through ILL than by subscription.

Upon viewing the findings related to most requested subjects, the library committee chose to include new editions of textbooks on cancer treatment, AIDS and diabetes to the list of acquisitions for 1994.

APPENDIX A

MEMORANDUM OF UNDERSTANDING

Recognizing that the Wooster Community Hospital is desirous of contracting for professional library information consulting services, and recognizing that Akron City Hospital is interested in providing such services; both parties agree to the following:

1) REFERENCE SERVICE- General reference service and literature searches will be available to all staff of Wooster Community Hospital. Akron City Hospital will provide these services by mail or telephone 7:30 am - 5:00 pm, Monday through Friday.

2) COMPUTERIZED LITERATURE SEARCHES - Computerized literature searches will be performed for all staff of Wooster Community Hospital by the reference staff of Akron City Hospital. Searches will include MEDLINE, health management databases, book publishing information, social science databases such as ERIC, PSYCH, and DRUG, and business information databases.

3) INTERLIBRARY LOANS - Akron City Hospital will provide interlibrary loans of books, audiovisuals, and journal articles. These items will be provided from our own collection and by the use of our networking capabilities which include the 10-State Medical Regional Library network. This network provides service for a fee. The service includes the provision of free and low cost films.

4) CONSULTING SERVICES - Akron City Hospital will provide a minimum of four (4) consulting visits per year by a professional reference librarian for the purpose of:

(a) providing training and consultation to the staff in the use of information services
(b) acquainting staff with available resources
(c) developing and cataloguing on-site collections
(d) providing documentation of services and policies congruent with JCAH standards
(e) working with Wooster Community Hospital staff members on specific requests

5) FINANCIAL ARRANGEMENTS - Wooster Community Hospital shall pay Akron City Hospital for library services provided pursuant to this Agreement as follows:

A. A charge of one hundred and sixty dollars ($160.00) per month payable on or before the first day of each month.

B. The charge set forth above shall cover all services provided by Akron City Hospital pursuant to this Agreement.

C. Akron City Hospital will review charges for library services annually for changes made necessary by inflation, hospital-wide wage increases, changes in reimbursement rates, etc.

6) TERM

A. This Agreement shall commence on July 1, 1992 and terminate at midnight on June 30, 1992. The Agreement may be renewed year to year upon the mutual agreement of the parties.

B. Either party may terminate this Agreement by giving thirty (30) days advance written notice to the other party.

SUMMA HEALTH SYSTEMS

BY _____

Beth O'Brien

Executive Vice President

Chief Operating Officer

DATE: 6-25-92

WOOSTER COMMUNITY HOSPITAL

BY _____

Richard Bajus

Administrator

DATE: 6-30-92

mmc/fg

Wooster Community Hospital

MEMORANDUM

TO: Medical Staff

FROM: Elizabeth Martin, RN, Hospital Education Coordinator

DATE: June 30, 1992

SUBJECT: LIBRARY SERVICE FOR MEDICAL STAFF

Beginning July 1, 1992 all requests for library service will be processed through the Hospital Education Department.

For your convenience the library will be staffed by either the Hospital Education Coordinator, Hospital Education Secretary or a volunteer librarian.

Monday	**7:30AM - 9:30AM**
Wednesday	**7:30AM - 9:30AM & 1:00PM - 3:00PM**
Friday	**7:30AM - 9:30AM**

A request box will be placed in the library for your use and will be checked daily for written requests. You may reach us at Ex. 234 or 235 (answering machine). When Hospital Education is closed, assistance may be obtained through Medical Records. (Hospital Education is open Monday - Friday, 7:30AM - 4:00PM.)

Requests will be communicated on a daily basis Monday - Friday to Akron City Hospital. Timely service is anticipated.

Requests for monthly updates have already been communicated to the library at Akron City Hospital to prevent interruption of service for you.

We will do our best to provide the information you need.

EM/ak

Wooster Community Hospital

MEMORANDUM

TO: All Departments - Professional Staff

FROM: Elizabeth Martin, RN, Hospital Education Coordinator

DATE: June 30, 1992

SUBJECT: LIBRARY SERVICE

Beginning July 1, 1992 all requests for library service will be processed through the Hospital Education Department.

You may contact us during our normal operating hours 7:30AM - 4:00PM, Monday - Friday (except holidays). Telephone: Ex. 235 (answering machine) or 234.

Written requests are acceptable. Please be as specific as possible. Requests will be communicated to our new library service at Akron City Hospital on a daily basis.

Affiliating with Akron City Hospital will provide professional library information and consulting services:

1. Reference service including literature searches, monthly updates, zeroxed articles.
2. Computerized literature searches - will include MEDLINE, health management databases, book publishing information, social science databases (ERIC, PSYC, and DRUG), and business information database.
3. Interlibrary loans (low cost rental, e.g. books)
4. Consulting services with a minimum of quarterly visits from the Akron City Hospital Director of Library Services or another designated medical librarian.
5. Provision of free or low cost films on a variety of medical/surgical techniques.
6. Physcians and Professional staff may use the library at Akron City anytime 9:00AM - 5:00PM, Monday - Friday.

EM/ak

BEST COPY AVAILABLE

APPENDIX C

WOOSTER COMMUNITY HOSPITAL

REFERENCE REQUEST

NAME_____ DATE_____

DEPT._____ PHONE_____

PLEASE STATE YOUR QUESTION AND ANY KEY WORDS THAT WOULD ASSIST IN OBTAINING INFORMATION FOR YOUR QUESTION:

ARE YOU SEEKING THIS INFORMATION FOR ANY OF THE FOLLOWING REASONS:

_____ FOR PATIENT CARE ONLY

_____ PATIENT CARE IN CONJUNCTION WITH A CONFERENCE PRESENTATION, i.e., GRAND ROUNDS

_____ LECTURE, TO PRESENT GENERAL INFORMATION

_____ RESEARCH AND WRITING, ONLY

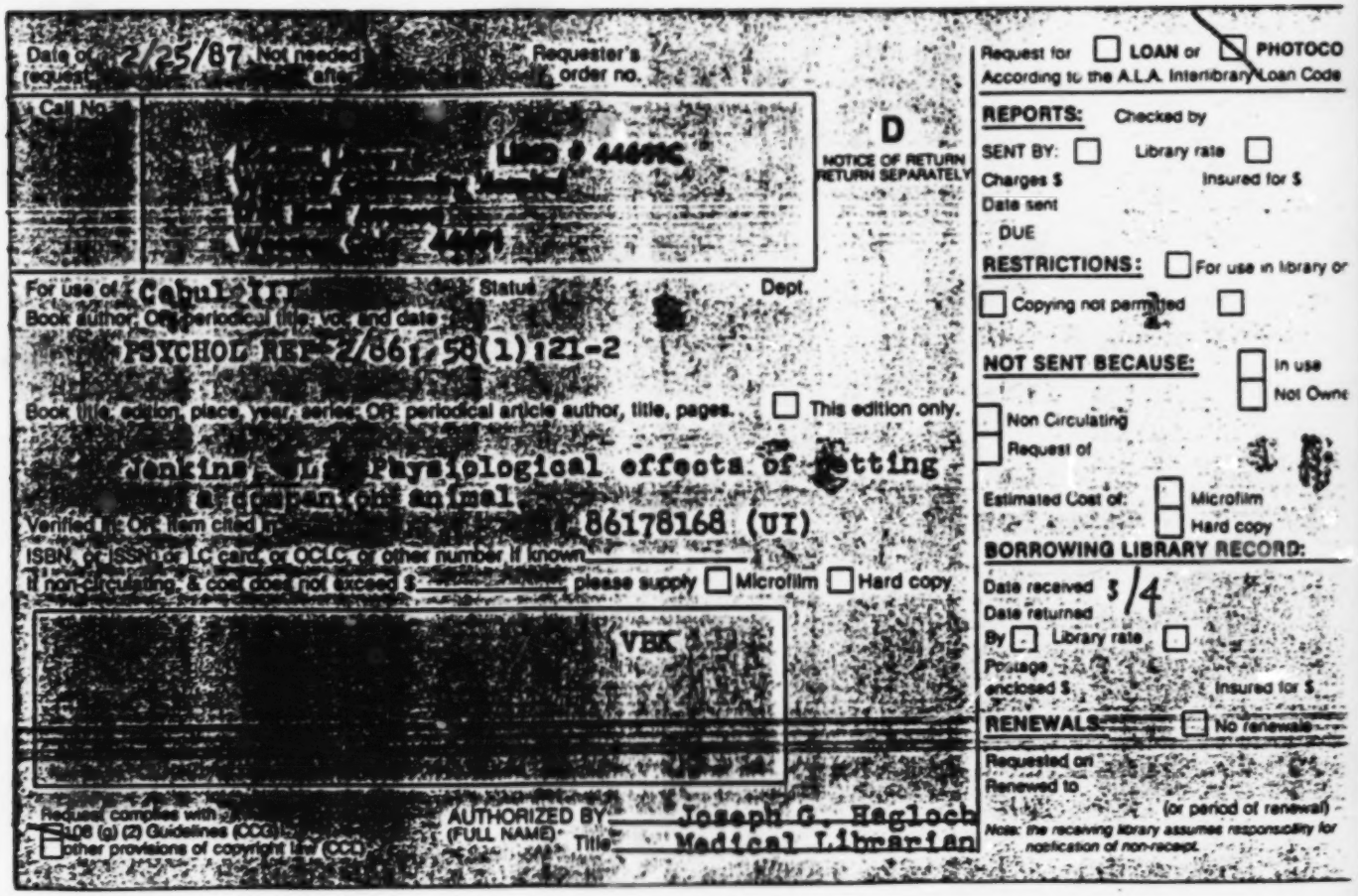
_____ RESEARCH FOR FORMAL EDUCATION RELATED TO YOUR POSITION IN THIS HOSPITAL

HOW MANY YEARS SHOULD THIS REQUEST COVER?_____

WHEN DO YOU NEED THE INFORMATION?_____

APPENDIX D

INTERLIBRARY LOAN FORM



Date of request: 2/25/87 Not needed after

Requester's order no.

Request for ☐ LOAN or ☒ PHOTOCO
According to the A.L.A. Interlibrary Loan Code

Call No.

D
NOTICE OF RETURN
RETURN SEPARATELY

REPORTS: Checked by
SENT BY: ☐ Library rate ☐
Charges $ Insured for $
Date sent
DUE

RESTRICTIONS: ☐ For use in library or
☐ Copying not permitted ☐

NOT SENT BECAUSE: ☐ In use ☐ Not Owned
☐ Non Circulating
☐ Request of

For use of Cabul, Ir. Dept. Status

Book author, OR periodical title, vol. and date:
PSYCHOL REP-2/86; 58(1):21-2

Book title, edition, place, year, series; OR periodical article author, title, pages. ☐ This edition only.
Jenkins, L. Physiological effects of petting a companion animal

Verified in OCLC item cited 86178168 (UI)

ISBN, or ISSN or LC card, or OCLC, or other number if known

If non-circulating & cost does not exceed $ please supply ☐ Microfilm ☐ Hard copy

Estimated Cost of: ☐ Microfilm ☐ Hard copy

BORROWING LIBRARY RECORD:
Date received 3/4
Date returned
By ☐ Library rate ☐
Postage enclosed $ Insured for $

RENEWALS ☐ No renewals
Requested on
Renewed to (or period of renewal)
Note: the receiving library assumes responsibility for notification of non-receipt.

VEK

Request complies with (1) 108 (g) (2) Guidelines (CCG) ☐ other provisions of copyright Law (CCG)

AUTHORIZED BY (FULL NAME) Joseph G. Hagloch Title Medical Librarian

BEST COPY AVAILABLE

NOTES

[1]Frederick W. Lancaster, If You Want to Evaluate Your Library (Champaign, IL: University of Illinois Graduate School of Library and Information Science, 1988), 1.

[2]William H. Kurth, Survey of the Interlibrary Loan Operation of the National Library of Medicine, U.S. Department of Health, Education and Welfare, Public Health Service (April 1962), 13.

[3]E. M. Lacroix, "A Comparison of Interlibrary Loan Requests Received by the National Library of Medicine: 1959 and 1984" Bulletin of Medical Libraries Association 75 (1) (January 1987): 7.

[4]Ibid., 10.

[5]A. Bleeker, "Analysis of External and Internal Interlibrary Loan Requests: Aid in Collection Management" Bulletin of the Medical Libraries Association 78 (October 1990): 345.

[6]Ibid., 352.

[7]Nancy E. Bernal, "Local Journal Holdings Availability Messages on CD & MEDLINE: Impact on Users and Interlibrary Loan Patterns," CD-Rom-Professional (May 1991): 26-28.

[8]Prudence-Ward Dalrymple, "Measuring Statewide Interlibrary Loan Among Multitype Libraries: A Testing of Data Collection Approaches," RQ 30;4 (Summer 1991). 534-47.

[9]Patricia A. Shelley, "Journal Evaluation Research of the Northside Medical Center Library of the Western Reserve Care System in Youngstown, Ohio," A masters research paper, Kent State University Graduate School of Library and Information Science, Kent, Ohio (1991).

SELECTED BIBLIOGRAPHY

Bernal, Nancy E. "Local Journal Holdings Availability Messages on CD & MEDLINE: Impact on Users and Interlibrary Loan Patterns." CD-Rom-Professional (May 1991): 26-28.

Bleeker, A. "Analysis of External and Internal Interlibrary Loan Requests: Aid in Collection Management" Bulletin of the Medical Libraries Association 78 (4) (October 1990): 345-52.

Dalrymple, Prudence-Ward "Measuring Statewide Interlibrary Loan Among Multitype Libraries: A Testing of Data Collection Approaches." RQ 30;4 (Summer 1991): 534-47.

Kurth, William H. Survey of the Interlibrary Loan Operation of the National Library of Medicine, U.S. Department of Health, Education and Welfare, Public Health Service (April 1962).

Lacroix, E. M. "A Comparison of Interlibrary Loan Requests Received by the National Library of Medicine: 1959 and 1984" Bulletin of Medical Libraries Association 75 (1) (January 1987): 7-13.

Lancaster, Frederick W. If You Want to Evaluate Your Library (Champaign, IL: University of Illinois Graduate School of Library and Information Science, 1988), 1-5.

Shelley, Patricia A. "Journal Evaluation Research of the Northside Medical Center Library of the Western Reserve Care System in Youngstown, Ohio," A masters research paper, Kent State University Graduate School of Library and Information Science, Kent, Ohio (1991).